GOVERNMENT OF INDIA
SCIENCE AND TECHNOLOGY
LOK SABHA

UNSTARRED QUESTION NO:669
ANSWERED ON:24.11.2006
SHRINKING OF INDIA
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Will the Minister of SCIENCE AND TECHNOLOGY be pleased to state:

(a) whether India is shrinking by 2 cm every year and after 200 million years from now, it will disappear, as reported in the daily Hindustan Times (Delhi edition) of September 10, 2006.

(b) if so, the details there of ;

(c) whether the government has examined the report ; and

(d) if so, the reaction of the Government thereon ?

Answer

MINISTER OF SCIENCE AND TECHNOLOGY AND MNISTER OF EARTH SCIENCES (KAPIL SIBAL)

(a) & (b): As per the theory of plate tectonics, the Mid oceanic ridges in the oceans keep on adding mass to plates. This process along with convection currents in the mantle causes all the plates in the globe to move with respect to each other. The movement of plates causes collision and subduction, where one plate goes down into another plate. This process is responsible for topography generation and earthquakes. Indian plate is under thrusting Eurasian plate in north at the rate of 2 cm/yr. From historical records, it is revealed that in the past Indian plate motion was never uniform, and it slowed down over last 100 million years. Assuming the present rate of plate motion of 2 cm/yr, it is too simplistic to say that India will disappear in 200 million years since the dynamics of Indian subcontinent is too complex. However, the present plate motion may not be continued over this wide time scale. i.e. 200 million years.

(c) & (d): Plate tectonics are the basic concept of earthquake occurrence. Seismologists study the plate motion and analyse the process of earthquake occurrence. There is nothing new in the report. The reported estimate of the plate rate is known for quite sometime and is consistent with previous findings. Department of Science & Technology has set up 41 permanent GPS stations all over the country to study the plate motion and is also supporting R&D projects to study the plate motion of different seismogenic zones of the country.